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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,497	11/07/2001	Zvi Slovin	233-94	6308

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Nixon & Vanderhye
1100 North Glebe Road 8th Floor
Arlington, VA 22201-4714

EXAMINER

NGO, NGUYEN HOANG

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	09/857,497		SLOVIN, ZVI	
	Examiner		Art Unit	
	Nguyen Ngo		2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/07/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 6-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 6-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5, drawn to a wireless local loop system, classified in class 370, subclass 338.
 - II. Claims 6-20, drawn to a Quality of Service System, classified in class 370, subclass 335.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of the wireless local loop system and the Quality of Service System are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the invention of the wireless local loop system discloses of a wireless system comprising a data network, PSTN gateway unit, and a multiplicity of wireless subscriber units and the workings of the system. The invention of the Quality of Service System does not mention any relevant components of the invention of the wireless local loop system.
3. Because these inventions are distinct for the reasons given above and the search required for Group 1 is not required for Group 2, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Larry Nixon on July 15, 2005 a provisional election was made to traverse to prosecute the invention of group 1 (a wireless local loop system), claims 1-5. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-20 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

5. The disclosure is objected to because of the following informalities:

On page 11, line 8 of the specification, there is a typo, the "radio unit in the BsyU can" should be - radio unit in the BSU can.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shneider (US 6,570,871) in view of Bossemeyer et al. (US 2002/0037004), hereinafter referred to as Shneider and Bossemeyer et al.

Regarding claim 1, Sneider discloses a wireless digital communication system that can selectively route wireless traffic via the public switched telephone network (PSTN) or the packet switched network (data network). Sneider further discloses that the wireless digital system comprises;

the internet and a mobile switching center (MSC) interfacing the internet and PSTN (a data network and a PSTN gateway unit, 72 and 62a of figure 2). Examiner interprets the MSC to correlate to a PSTN gateway unit.

that encoded digital voice samples be supplied to the MSC from the base station (BTS) via transmission lines (at least one data line and at least one base stations connected to the gateway unit via said at least one data line respectively, 68 and 63 of figure 2 and col16 lines25-26).

of mobile stations (MS) that reliably transmit data over the common air interface between the MS and the base station (a multiplicity of wireless subscriber units

communicating wirelessly with the base station, 70a, 70b and col6 lines 56-65), and that mobile stations may also be describes as a digital wireless telephone (wireless subscriber unit comprising at least one interfaces to at least one host including a telephone host, col6 line56). Sneider further discloses that the mobile station includes;

a speech decoder which outputs an analog signal in response to the parameters supplied by the digital voice sample (col11 lines 1-5 figure 3) to a loud speaker (110) and further states that a digital to analog converter which generates analog signals from the digital sample is equivalent to the speech decoder (analog converter operative to translate incoming information in IP packet format into analog voice representation and to feed said analog voice representation to the telephone host, col14 lines 51-55).

a speech coder (CELP 120 figure 3) which digitizes analog speech signal from a microphone (122), into digital voice samples (col9 lines 5-8), and further states that the transmitter (96) outputs the modulated wireless signal carrying the encoded digital samples to the antenna for reception by the base station (translate incoming analog voice information into IP packet formatted information and to feed said IP packet formatted information to the base station, col10 lines 40-42).

Sneider however fails to discloses the limitation of a packet switcher as well be discussed later.

Sneider further discloses a gateway interface assigns a packet address corresponding to the destination telephone number and outputs the digital voice sample segments as data packets onto a packet switched network, for reception by a network

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node corresponding to the destination address (perform packet switching on incoming IP packets based on an IP destination address included in each said incoming IP packet, abstract). It should be obvious that this gateway interface may be implemented in the base station.

Sneider further discloses that the MSC includes a switching system which performs all routing and call management of voice traffic (col13 lines47-55), and states that the switching system receives digital voice sample from base station via communication lines which is checks the destination telephone number corresponding to the received traffic to see if it is forwarded to the internet (switch incoming data packets onto the data network, col13 lines 55-66 and col14 lines 39-41), further states that the MSC includes a transcoder that converts the digital voice samples into an appropriate format for transmission to the PSTN (translate incoming voice packets from IP format into analog voice representation and to switch said analog voice representation onto the PSTN, col14 lines 45-49 and figure 7).

Sneider however fails to disclose of a subscriber unit comprising a packet switcher operative to perform packet switching on IP packets arriving fro the base station connected to the subscriber unit, including routing IP packets for hosts other than the telephone host to those host and routing IP packets for the telephone host to the analog converter.

Bossemeyer however discloses of a home gateway system that integrates the information carrying needs of a home user and combines a full service voice answering and reception capability, with internal switched connection, and a router for data communication products (page 7 [0078]) and thus provides the motivation for switching data in a mobile station disclosed by Schneider that includes other communication products. Bossemeyer further discloses that the home gateway system of figure 1, comprises a transceiver to establish a wireless local loop connection with a base station (packet switcher operative to perform packet switching in IP packets arriving from the base station connected to the subscriber unit, page 3 [0037]) and a switch (packet switcher) which has a plurality of input lines so that telephones, facsimile, modems, and other devices may be connected. Bossemeyer further states that analog devices require A/D CODEC in order to connect to the switch (routing IP packets for host other than the telephone host to those hosts and routing IP packets for the telephone host to the analog converter, figure 1 and figure 4 and page 3 [0037]).

It should thus be obvious to a person skilled in the art to incorporate a home gateway system, which switches IP packets among a plurality of communication devices, discloses by Bossemeyer into the wireless digital communication system that can selectively route wireless traffic via the public switched telephone network (PSTN) or the packet switched network (data network) disclosed by Schneider. More specifically to incorporate the Home Gateway System disclosed by Bossemeyer into the Mobile Station disclosed by Schneider to effectively and efficiently route wireless traffic

for different types of communication products, not just the digital telephone disclosed by Schneider.

Regarding claim 2, Schneider and Bossemeyer disclose all the limitation of claim 2 as discussed with claim 1. More specifically, Bossemeyer discloses a switch (packet switcher), which has a plurality of input lines so that telephones, facsimile, modems, and other devices may be connected (host comprises a telephone, a telefax, a data modem, and a cable modem, page 3 [0037]). It would be obvious to a person skilled in the art that a computer also be a typical communication device disclosed by Bossemeyer.

Regarding claim 3, Schneider and Bossemeyer disclose all the limitation of claim 3 as discussed with claim 1. More specifically, Schneider discloses transmitting the digital samples on high-speed tandem trunk lines such as T1 or T3 lines (wired data lines, page 8 lines 1-3).

Regarding claim 4, Schneider and Bossemeyer disclose all the limitation of claim 4 as discussed with claim 1. Figure 2 discloses of the data network being the Internet.

Regarding claim 5, Schneider and Bossemeyer disclose all the limitation of claim 5 as discussed with claim 1. More specifically Schneider discloses a system and a method that can selectively route wireless traffic via the public switched telephone network (PSTN) or the packet switched network (data network, abstract). It should be noted that

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claim 5 is simply the method of the system disclosed in claim 1 and the arguments of claim 1 may be used here.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Preston et al. (U.S 2002/0093924), In-Band Signaling For Data Communications Over Digital Wireless Telecommunications.

b) Farris et al. (U.S 6721306), Public Wireless/Cordless Internet Gateway.

c) Gorman et al. (U.S2002/0110115), Telecommunication System Method and Subscriber Unit For Use Therein.

d) Jennings et al. (U.S 6430174), Communication System Supporting Simultaneous Voice And Multimedia Communications and Method of Operation Therefore.

e) Holmquist (U.S 6704324), Apparatus and Method For Transmission of Voice Band Signals Over A DSL Line.

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f) Ho (U.S 6452922), Method and Apparatus For Fallback Routing Of Voice Over Internet Protocol Call.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NN.

Nguyen Ngo

United States Patent & Trademark Office
Patent Examiner AU 2663
(571) 272-8398


RICKY NGO
PRIMARY EXAMINER
8/8/05

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